

Notice of Allowability

Application No.

10/508,816

Examiner

Andrew Wendell

Applicant(s)

DENK ET AL.

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/29/2007.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Regarding claim 1, the prior art of record, Hirata (US Pat# 5,920,557) teaches a correction unit B configured to produce an output data signal based on a received correction signal, a sequence control 9 (Fig. 2) unit connected downstream from the correction unit B (Fig. 2) and configured to produce a working clock signal, a counter unit 5 (Fig. 2) electrically connected to the sequence control unit 9 (Fig. 2) and a control device A (Fig. 2) configured to compare the internal actual transmission time signal with an external nominal transmission time signal to produce the correction signal, and further configured to transmit the correction signal to the correction unit in order to correct the actual transmission time (Col. 3 lines 6-27).

Scott (US Pat# 6,388,997) teaches a counter unit 911 (Fig. 9) electrically connected to the sequence control unit 906 (Fig. 9) and configured to use the working clock signal from the sequence control unit 906 (Fig. 9) to generate an internal actual transmission time signal (Col. 19 line 57-Col. 20 line 32).

The prior art of record fails to teach a device for controlling an absolute transmission time of a continuous transmission signal in a transmitting/receiving unit comprising a correction unit configured to produce an output data signal based on a received correction signal, wherein the correction unit comprises a fractional sampling rate converter unit comprising a variable sampling rate conversion ratio, wherein the fractional sampling rate converter unit comprises a first input configured to receive an

Art Unit: 2618

input data signal having an input sampling rate, and an output configured to output the output data signal having an output sampling rate, and a second input configured to receive the correction signal and adjust the sampling rate conversion ratio thereof based on the correction signal, a sequence control unit connected downstream from the correction unit and configured to produce a working clock signal, a counter unit electrically connected to the sequence control unit and configured to use the working clock signal from the sequence control unit to generate an internal actual transmission time signal, and a control device configured to compare the internal actual transmission time signal with an external nominal transmission time signal to produce the correction signal, and further configured to transmit the correction signal to the correction unit in order to correct the actual transmission time.

Also, applicant's remarks filed on 1/29/2007 further state reasons for allowance.

The prior art of record fails to teach the claimed subject matter as claimed and substantially connected in claims 1-8.

Regarding claim 9, the prior art of record, Hirata (US Pat# 5,920,557) teaches producing an internal actual transmission time signal in the transmitting/receiving unit, containing information about an actual transmission time (Col.3 lines 8-12), comparing 4 (Fig. 2) the internal actual transmission time signal with an external nominal transmission time signal which is received at the transmitting/receiving unit and which contains information about a nominal transmission time (Col. 3 lines 8-13), producing a difference signal in the transmitting/receiving unit, which contains information about a discrepancy between the two transmission times associated with the actual and nominal

Art Unit: 2618

transmission time signals, and correcting B (Fig. 2) the actual transmission time is in the transmitting/receiving unit such that the discrepancy between the two transmission times, contained in the difference signal, is minimized, wherein the correction is carried out independently of a defined clock 8 (Fig. 2) period of the transmitting/receiving unit, and wherein a time period for the correction is set variably therein, and wherein a time duration of the correction is set by a value of a conversion ratio of a sampling of an input data signal, and an output data signal, respectively (Col. 3 lines 6-Col. 5 line 24).

The prior art of record fails to teach a method for controlling the transmission time of a continuous transmission signal in a transmitting/receiving unit, comprising producing an internal actual transmission time signal in the transmitting/receiving unit, containing information about an actual transmission time, comparing the internal actual transmission time signal with an external nominal transmission time signal which is received at the transmitting/receiving unit and which contains information about a nominal transmission time, producing a difference signal in the transmitting/receiving unit, which contains information about a discrepancy between the two transmission times associated with the actual and nominal transmission time signals, and correcting the actual transmission time is in the transmitting/receiving unit such that the discrepancy between the two transmission times, contained in the difference signal, is minimized, wherein the correction is carried out independently of a defined clock period of the transmitting/receiving unit, and wherein a time period for the correction is set variably therein, and wherein a time duration of the correction is set by a value of a

conversion ratio of a fractional sampling rate of an input data signal, and an output data signal, respectively.

Also, applicant's remarks filed on 1/29/2007 further state reasons for allowance.

The prior art of record fails to teach the claimed subject matter as claimed and substantially connected in claims 9-21.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Enari discloses a transmitter for mulichannel digital data and transmission method. Rakib discloses an apparatus and method for equalization in distributed digital data transmission systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Andrew Wendell
Examiner
Art Unit 2618

4/13/2007



NAY MAUNG
SUPERVISORY PATENT EXAMINER